

What is claimed is:

1. A recombinant adenovirus expression vector characterized by the inability to express adenoviral protein IX DNA and having the ability to express a foreign gene.
2. The recombinant adenovirus expression vector of claim 1, wherein the vector does not contain the DNA sequence encoding adenovirus protein IX.
3. The recombinant adenovirus expression vector of claim 1, having a deletion of the protein IX gene sequence extending from about 3500 bp from the 5' viral termini to about 4000 bp from the 5' viral termini.
4. The recombinant adenovirus expression vector of claim 2 further comprising deletion of a non-essential DNA sequence in adenovirus early region 3 and/or early region 4.
5. The recombinant adenovirus expression vector of claim 2 further comprising deletion of a DNA sequences designated adenovirus Ela and Elb.
6. The recombinant adenovirus expression vector of claim 2 further comprising deletion of early region 3 and/or 4 and DNA sequences designated adenovirus Ela and Elb.
7. The recombinant adenovirus expression vector of claim 5 or 6 further comprising a deletion of up to forty nucleotides positioned 3' to the Ela and Elb and pIX deletion and a foreign DNA molecule encoding a polyadenylation signal.

8. A recombinant adenovirus expression vector having the restriction enzyme map of Figure 1.

9. The recombinant adenovirus expression vector of claims 1 to 8, wherein the adenovirus is a Group C adenovirus selected from a serotype 1, 2, 5 or 6.

10. The recombinant adenovirus expression vector of claim 1, wherein the foreign gene is a DNA molecule up to 2.6 kilobases.

11. The recombinant adenovirus expression vector of claim 4 or 6, wherein the foreign gene is a DNA molecule up to 4.5 kilobases.

12. The recombinant adenovirus expression vector of claim 1, wherein the foreign gene encodes retinoblastoma tumor suppressor protein or a biologically active fragment thereof.

13. The recombinant adenovirus expression vector of claim 12, wherein the tumor suppressor protein is p110^{RB}.

14. The recombinant adenovirus expression vector of claim 12, wherein the biologically active fragment is p56^{RB}.

15. The recombinant adenovirus expression vector of claim 1, wherein the foreign gene encodes p53 protein or an active fragment thereof.

16. A transformed eucaryotic host cell comprising the recombinant adenovirus expression vector of claims 1 through 14.

17. The transformed cell of claim 16, wherein the eucaryotic cell is a 293 cell.

18. A method of producing a polypeptide or protein which comprises growing the transformed eucaryotic host cell of claim 17 under conditions favoring transcription and translation of the foreign gene and
5 isolating the polypeptide or protein so produced.

19. The polypeptide or protein produced by the method of claim 18.

20. A method of treating a pathology in a subject caused by the absence of a tumor suppressor gene or the presence of a pathologically mutated tumor suppressor gene comprising administering to the subject an effective
5 amount of the vector of claim 1 containing a foreign gene encoding a gene product having a tumor suppressive function, under suitable conditions.

21. The method of claim 20, wherein the gene product is expressed by a tumor suppressor gene.

22. The method of claim 20, wherein the tumor suppressor gene is wild-type p53 gene, cDNA encoding p53, retinoblastoma gene RB, cDNA encoding RB protein or polypeptide, Wilm's tumor gene WT1 or colon carcinoma gene
5 DCC.

23. A method of gene therapy comprising administering to the subject an effective amount of the vector of claim 1.

24. A method of gene therapy comprising administering to a cell an effective amount of the vector of claim 1.

25. A method of ameliorating a pathology characterized by hyperproliferative cells or genetic defect in a subject comprising administering to the subject an

effective amount of the vector of claim 1 containing a foreign gene encoding a gene product having the ability to ameliorate the pathology under suitable conditions.